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MEDIATALK

# QUICK GUIDE LIBRARY TREND MONITORING FOR OPEN SCIENCE

*How libraries can organise their trend monitoring  
with limited resources*

*The world of research is changing rapidly, driven primarily by Open Science: whether Open Access, Open Research Data, Open Educational Resources or Altmetrics – many fields are reporting new developments on an almost daily basis. How can libraries keep up to date? And how can they manage to distinguish short-term trends from lasting developments? This guide is intended to provide a quick overview of trend monitoring.*

## I. THE TREND MONITORING WORKFLOW

### Finding and recognising trends

#### 1. Open your eyes!

Keep your eyes open: anything you come across in daily life could be an innovation, and realised innovations are indications of trends. Pay attention to innovations that companies put onto the market. After all, what researchers and other library users see companies doing shapes their expectations and is transferred to libraries and other Open Science sponsors. What a company brings to the market as an innovation is also a bet on future developments that it makes based on its customer knowledge. You can make use of this collected wisdom of the crowd along with their bets on the future for yourself. Since information about trends is condensed in innovations, it is easier and more efficient to observe innovations than customer behaviour.

#### 2. Be open-minded

Simply keeping your eyes open, however, is not enough; discovering Open Science opportunities also requires open-mindedness. In any case, rather than immediately dismissing an innovation as nonsense, you should consider why it probably exists, how it will affect customer expectations and how it could be transferred to your own industry. Even seemingly bizarre niche innovations could provide valuable information and should not be ignored, as they can lead to a shift in expectations even among users with less unusual desires.

### **3. Don't focus on individual innovations – create clusters**

A single observed innovation alone does not yet constitute a trend! Identifying trends requires the creation of clusters of several innovations. Consumer and social media trends have a particularly strong influence on user expectations, including with respect to Open Science. Trends must be distinguished from short-lived hypes: what we do is a trend. How we do it may be a fad. Trends emerge when external change unlocks new opportunities to serve basic human needs in new ways. The specific offer people make use of may be a fad. If individual innovations fail, this can have various causes and does not necessarily contradict the effectiveness of the trend.

### **4. Use sources of information for trend monitoring**

Inform yourself about trends systematically. Although reading trend reports is recommended, Open Science events, research results, crowdfunding websites, thought leaders and futurologists are further examples of information sources for trend monitoring. Part II of this quick guide provides you a list of useful links that are well suited for introductory research.

## **Organising trends**

### **5. Use an infrastructure for trend monitoring**

It is important to prepare, organise and make trend information available in such a way that those who take it seriously can keep track of it and always make effective use of it. It thus makes sense to collect it at a central location. A wiki is suitable for this, for example. The advantage of a wiki is that trends can be presented as an overview – like in tabular form – and specific trend topics can be covered in more depth on individual sub-pages. Collecting trends in a (social) intranet, in a blog or with other platforms or apps is also conceivable, especially if they are already being used.

## 6. Organise trend information with savvy

As the large amount of trend information means that it can quickly become unmanageable, it makes sense to structure the content. Information on changes in the environment that give rise to the macro trends can also be taken into account. This information should be broken down into smaller parts. The [PEST\(LE\)](#) framework or adaptations of it are suitable for example, with the information classified into political, economic, social, technological, legal and environmental topics or into technological, socio-cultural, politico-legal, economic and ecological factors. You could also break down trends according to the various Open Science areas.

## 7. Distinguish: Macro, mega or simply a trend?

Whether something is a “macro trend”, a “mega trend” or a “micro trend” is not absolutely defined. Macro trends or mega trends are generally comprehensive, reflect profound changes in the environment, remain stable over years and can be applied in different areas. They can be subdivided into individual, smaller trends. Mega/macro trends can be traced back to two fundamental influences: intrinsic human needs and desires on the one hand and changes in the environment, such as those related to Open Science, on the other.

## Turning trends into innovations

### 8. Prioritise trends – emphasise the main points

It is important to prioritise the trends in order to derive concrete innovations from trend information. You should think about what is really important for your own organisation and reflects its goals, possibilities, resources and vision of the future:

- Which trends are particularly relevant for us?
- Which trends should we make use of?
- Now or later?

The selection of the three to ten most promising trends can for example be supported by a [consumer trend radar](#) tool (German).

## 9. Check the opportunities selected trends offer

Trends reflect human needs and desires. You should thus check the most relevant trends for their innovation potential for the Open Science sector:

- **Timing:** Even if the relevant trend is no longer entirely new, it is not necessarily too late: What are the possible uses for the trend today? What do users expect today?
- **Location:** How can you adapt the trend to suit local conditions? What do local users expect?
- **Industry:** How can you transfer the trend from other industries? What do users expect from libraries?

## 10. Use tools and formats to derive innovation potential

You can, for example, use a Consumer Trend Canvas (such as from [TrendWatching](#)) for systematic work with trends as part of an innovation workshop. Such a workshop can either focus on a single trend or have the participants work on different trends in small groups. Various trends can also be combined to derive ideas for innovation.

Alongside innovation workshops, other options for developing innovation ideas include inviting experts to give a lecture on a trend topic or assigning students topics for project or final papers. You can also select a trend of the month internally, for which colleagues come up with examples and ideas. Or you can have them work on Open Science innovation ideas as part of a hack day or hackathon.

## II. ENTRY SOURCES FOR TREND MONITORING

### Regular trend reports for libraries and the science system

- [Horizon Report 2020](#)
- [„Top Trends in Academic Librarie“ of the Association of College and Research Libraries 2020](#)
- [Higher Education Report 2020 Stifterverband \(German\)](#)
- [Hochschulforum Digitalisierung](#)
- [Centrum für Hochschulentwicklung \(German\)](#)

### General trend and technology monitoring services

- [TrendWatching](#)
- [Springwise](#)
- [Trendhunter](#)
- [Gartner Hype Cycles](#)
- [J. Walter Thompson Intelligence Trend Reports](#)

### Open Science news sources

- [ZBW MediaTalk](#)
- [News from the Leibniz Research Alliance Open Science](#)
- [Subreddit „For all things Open Science“](#)
- [Open Access Tracking Project \(OATP\)](#)
- [The Scholarly Kitchen](#)
- [Open Science Newsletter](#)
- [Science Geist](#)
- [LSE Impact Blog](#)
- [rfi-Infoticker \(German\)](#)
- [Helmholtz Open Science Newsletter \(German\)](#)

### Open Science Podcasts

- [ORION Open Science Podcast](#)
- [Open Science Radio](#)
- [The Road to Open Science](#)
- [Open Science Talk](#)

## Follow-Tipps for Twitter

- [Open-Science-List of ZBW MediaTalk](#)
- [Center for Open Science](#)
- [Foster Open Science](#)
- [OpenAIRE](#)
- [EOSC-hub](#)
- [Open Science MOOC](#)
- [GO FAIR](#)
- [Voices of the Open Science Fellows Freies Wissen](#)
- [Knowledge Exchange](#)
- [Library Carpentry](#)
- [Elephant in the Lab](#)
- [OERinfo](#)

### III. QUICK TREND MONITORING CHECKLIST

<b>Finding and recognising trends</b>		
We keep our eyes open for innovations in everyday life.		
We make sure that we are open-minded.		
We create clusters rather than focusing on individual innovations.		
We make systematic use of information sources for trend monitoring.		
<b>Organising trends</b>		
We use an infrastructure for trend monitoring.		
We organise trend information in a meaningful way.		
We create a trend hierarchy: macro, mega or simply a trend?		
<b>Turning trends into innovations</b>		
We prioritise trends.		
We check what opportunities are offered by selected trends.		
We use tools and formats to derive innovation potential.		



**Further Information:**

- Mason, Henry; Mattin, David; Luthy, Maxwell; Dumitrescu, Delia:  
Trend Driven Innovation | Wiley, Hoboken/NJ, 2015
  
- Fingerle, Birgit; Mumenthaler, Rudolf:  
Innovationsmanagement in Bibliotheken | De Gruyter Saur, Berlin, 2016